

From: "Taylor, Melissa" <Taylor.Melissag@epa.gov>
To: John Hunt <jhunt@demaximis.com>, "Andrew.Schkuta@m-e.aecom.com" <Andrew....
CC: "mdnorton@ddesllc.com" <mdnorton@ddesllc.com>, Bruce Thompson <brucet@de...
Date: 10/1/2013 10:40 AM
Subject: RE: Tank House Plan- Additional QA Testing for Solidified Tank House Sludge

Yes, this is an official approval provided you incorporate the additional QA testing.
Thanks.

From: John Hunt <jhunt@demaximis.com>
Sent: Tuesday, October 01, 2013 9:42 AM
To: Taylor, Melissa; Andrew.Schkuta@m-e.aecom.com; garry.waldeck@state.ma.us
Cc: mdnorton@ddesllc.com; Bruce Thompson
Subject: RE: Tank House Plan- Additional QA Testing for Solidified Tank House Sludge

Melissa,

Is this an official approval?

Sorry to hear about the shut down. Hopefully it will only be a day or two.

Thanks
John

John M Hunt
de maximis, inc.
Mobile: (617) 957-5961

jhunt@demaximis.com

>>> "Taylor, Melissa" <Taylor.Melissag@epa.gov> 10/1/2013 9:38 AM >>>
Great. Thank you. Hopefully I'll be back to work soon!!!

From: John Hunt <jhunt@demaximis.com>
Sent: Tuesday, October 01, 2013 9:18 AM
To: Taylor, Melissa; Andrew.Schkuta@m-e.aecom.com;
garry.waldeck@state.ma.us
Cc: mdnorton@ddesllc.com; Bruce Thompson
Subject: RE: Tank House Plan- Additional QA Testing for Solidified Tank House Sludge

Melissa,

We agree to what you proposed below.

Thanks
John

Message Sent with NotifySync

-----Original Message-----

From: Taylor.Melissag@epa.gov
Sent: Tue, 1 Oct 2013 9:03:01 AM America/New_York
To:
jhunt@demaximis.com,Andrew.Schkuta@m-e.aecom.com,garry.waldeck@state.ma.us

CC: brucet@demaximis.com,mdnorton@ddesllc.com
Subject: RE: Tank House Plan- Additional QA Testing for Solidified
Tank
House Sludge

John,
I am on furlough as of 12:30 today, so if we can resolve this before
then, all the better. If not, you should work with Andy directly --
he
is authorized to work on my behalf. If there are other issues, please
feel free to contact Bob Cianciaulo. Bruce has his contact info.

Here is our take on the requirements:

The proposed testing seems to address differences in activity
between
pails. Activities are not expected to be consistent from pail to pail
due to differences in expected activity of the sludge added to each
specific pail. Differences in activity from pail to pail cannot be
attributed to incomplete mixing of the sludge and cement within an
individual pail.

The purpose of the testing is to confirm that a single pail contains
homogeneous material, which is determined by comparing the activity of
a
series of subsamples taken from the same pail. If the pail is
homogeneous, the portion of sludge in that specific pail should be
evenly distributed throughout the pail, which will be verified by
similar activity noted between all the subsamples taken from the same
pail. One would expect the variability in activity for all the
subsamples from the same pail to be fairly low (<10%). It is
recommended the initial testing on the first five pails be to collect
five subsamples from throughout the container (including the top,
middle, bottom, side, center, etc.), with the variability in activity
of
the subsamples measured for each pail. This variability can be used
to
determine what the expected variability should be within a pail
throughout the entire program. It may be appropriate to reduce the
number of subsamples to three per pail for the 5% random test program,
as long as the subsamples are collected from different areas of each
pail.

If variability is higher than expected within a pail randomly tested
during the program, corrective action must be taken to determine why
the
sample is not homogeneous. Only TCLP testing can be used to determine
if a specific pail should be classified as RCRA waste.

From: John Hunt <jhunt@demaximis.com>
Sent: Monday, September 30, 2013 2:56 PM
To: Taylor, Melissa; Andrew Schkuta; Garry Waldeck
Cc: Matt Norton; Bruce Thompson
Subject: Tank House Plan- Additional QA Testing for Solidified Tank House Sludge

Melissa,

Based on discussions this afternoon, we will add the following QA requirements for solidified sludge:

A health physics technician will sample the first 5 batches of solidified sludge and 5% randomly thereafter to determine activity per volume. Three replicate samples will be obtained from the first 5 batches to assess the homogeneity of radioactivity and establish a baseline. Representative samples from 5% of the batches produced will be selected using random number generation. Technicians performing the solidification will not know which batches will be sampled prior to production.

A known volume of the mixture (5ml) will be plated on a 47 mm dish and allowed to harden for 24 hours. The samples will be counted on the Tennelec alpha beta counter to establish activity per volume sampled. Since there is expected to be some variability in the concentration of DU sludge, a pass/fail criteria of $\pm 20\%$ of the established activity will be established. Material not meeting this criteria will be managed as RCRA debris.

Please let me know if this is an acceptable approach.

Thanks
John

John M Hunt
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